What Is Claimed Is:

1. A vibration compensation apparatus comprising:

an angular velocity detector that detects a plurality of angular velocities in two orthogonal detection axes directions, and outputs corresponding angular velocity signals;

a compensation unit that compensates vibration in a plurality of compensation axis directions; and

a conversion unit that converts the plurality of angular velocity signals obtained by said angular velocity detector or a plurality of vibration compensation signals based on the plurality of angular velocity signals into vibration compensation signals expressed in the coordinates of the compensation axes of said compensation unit,

wherein said compensation unit compensates the vibration based on the vibration correction signals converted by said conversion unit.

2. The vibration compensation apparatus according to claim 1, wherein, let the plurality of angular velocity signals or correction signals be x, y, an angle made by the detection axes of

the angular velocity unit and the compensation axes of the compensation unit be θ, and the converted signals be X and Y, then said conversion unit performs the following operations:

$$X = x\cos\theta - y\sin\theta$$

$$Y = y\cos\theta + x\sin\theta$$

3. The vibration compensation apparatus according to claim 1, wherein said conversion unit has a conversion table storing values to be used in the conversion operation.

4. The vibration compensation apparatus according to claim 1, wherein said compensation unit comprises an optical compensation unit.

5. An image sensing apparatus comprising:

an photoelectric converter that senses an image by converting incident light into an electric signal; and

the vibration compensation apparatus according to claim 1,

wherein said compensation unit compensates vibration by controlling read out timing of the electric signal from said photoelectric converter.

6. An image sensing apparatus comprising:

an photoelectric converter that senses an image by converting incident light into an electric signal; and

the vibration compensation apparatus according to claim 1,

wherein said compensation unit compensates vibration by processing the electric signal outputted from said photoelectric converter.

7. A vibration compensation method using an angular velocity detector which detects a plurality of angular velocities in two orthogonal detection axes directions, and outputs angular velocity signals, and a compensation unit which compensates vibration in a plurality of compensation axis directions, comprising:

converting the plurality of angular velocity signals obtained by said angular velocity detector or a plurality of vibration compensation signals based on the plurality of angular velocity signals into vibration compensation signals expressed in the coordinates of the compensation axes of the compensation unit; and

compensating the vibration by controlling the compensation unit based on the converted vibration compensation signals.

8. A storage medium, readable by an information processing apparatus, storing a program including program codes capable of realizing the vibration compensation method according to claim 6, the program being executable by the information processing apparatus.